

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source:

Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
 U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
 Alexandria, VA 22314

Revised 01/10/06



Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/573) 130
ATTN: NEW RULES CASES:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220><223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <10> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
Patentin 2.0 "bug"	Please do not use "Copy to Disk" function of Patentin version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13Misuse of n/Xaa	"n" can only represent a single <u>nucleotide</u> ; "Xaa" can only represent a single <u>amino acid</u>
(AMC Bistochaslaw Surrama Broach 00/00/2003





IFWP

RAW SEQUENCE LISTING DATE: 04/04/2006
PATENT APPLICATION: US/10/573,130 TIME: 10:13:06

Input Set : A:\Final Sequence list-13111-00035-US.txt

Output Set: N:\CRF4\04042006\J573130.raw

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             Kesseler, Maria
             Hauer, Bernhard
             Friedrich, Thomas
             Breuer, Michael
     9 <120> TITLE OF INVENTION: Methods for the production of
    10
             3-methylamino-1-(thiene-2-yl)-propane-1-ol
    12 <130> FILE REFERENCE: 13111-00035-US
C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/573,130
C--> 14 <141: CURPENT FILING DATE: 3005-03-23
    14 <150> PRIOR APPLICATION NUMBER: PCT/BP2004/010939
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    15 <151> PRIOR FILING DATE: 2004-09-30
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    17 <150> PRIOR APPLICATION NUMBER: DE 103 45 772.0
    18 <151> PRIOR FILING DATE: 2003-10-01
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    22 <170> SOFTWARE: PatentIn version 3.3
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RAW SEQUENCE LISTING PATENT APPLICATION: US/10/573,130 DATE: 04/04/2006 TIME: 10:13:06

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93 ttg ggt atc ggt tta gct atc gcc acg aag ttc gtt gaa gaa ggg gct 94 Leu Gly Ile Gly Leu Ala Ile Ala Thr Lys Phe Val Glu Glu Gly Ala	96
95 20 25 30	
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98 Lys Val Met Ile Thr Gly Arg His Ser Asp Val Gly Glu Lys Ala Ala 99 35 40 45	
101 aag agt gtc ggc act cct gat cag att caa ttt ttc caa cat gat tct	192
102 Lys Ser Val Gly Thr Pro Asp Gln Ile Gln Phe Phe Gln His Asp Ser	
103 50 55 60	
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106 Ser Asp Glu Asp Gly Trp Thr Lys Leu Phe Asp Ala Thr Glu Lys Ala 107 65 70 75 80	
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110 Phe Gly Pro Val Ser Thr Leu Val Asn Asn Ala Gly Ile Ala Val Asn	
111 85 90 95	
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114 Lys Ser Val Glu Glu Thr Thr Thr Ala Sld Thr Arg Lys Leu Ala 115 100 105 110	-
117 gtc aac ctt gat ggt gtc ttc ttc ggt acc cga tta ggg att caa cgg	384
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119 115 120 125	
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134 Lys Asp Tyr Asp Val Arg Val Asn Thr Val His Pro Gly Tyr Ile Lys	3.0
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143 210 215 220	
145 tac atc tgt gtt tac ttg gct tct aac gaa tct aaa ttt gca acg ggt	720
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RAW SEQUENCE LISTING DATE: 04/04/2006 PATENT APPLICATION: US/10/573,130 TIME: 10:13:06

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RAW SEQUENCE LISTING DATE: 04/04/2006 PATENT APPLICATION: US/10/573,130 TIME: 10:13:06

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	Gly		Val	His	His	Val		Gln	Leu	Asp	Leu	Ser	Asp	Val	Asp	Ala	
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290 292 294 296 300 302 303 306 307 310 311 314 315 322 323 326 327 330 331 334 335	<210 <211 <212 <400 Asn 1 Ile Leu Gly Ala 65 Leu Ala Ile Asn	l> Li 2> T: 3> OI 0> SI Ala Lys Lys Gln 50 Ala Val Lys Ala Thr	ENGTH (PE: (GAN) EQUENTE Leu Gln 35 Val Ala Ser Gln Leu 115 Pro	PRT ISM: ISM: ISM: Val Ala 20 Leu His Phe Asn Asp 100 Ala Ala	Cand Cand Thr Slu Glu His Lys Ala 85 Trp	150 lida Gly Glu Ala Val Gly 70 Gly Ser Thr	magn Gly Gly Val Trp 55 Ser Val Gln Phe Val	Ser Tyr Lys 40 Gln Pro Ala Met Ala 120 Phe	Arg Ser 25 Ala Leu Leu Gln Leu 105 Lys	Gly 10 Val Lys Asp Pro Phe 90 Ala Ala Ser	Ile Thr Leu Ala 75 Ser Ile Ile Ser	Gly Ile Pro Ser 60 Ser Pro Asn Gly Asn 140	Ala Ile 45 Asp Arg Phe Leu Asp 125 Val	Ser 30 Val Val Tyr Ile Ala 110 Lys	15 Arg Lys Asp Asp Glu 95 Ala	Gly Gln Ala Val 80 His Pro	

RAW SEQUENCE LISTING DATE: 04/04/2006
PATENT APPLICATION: US/10/573,130 TIME: 10:13:06

Input Set : A:\Final Sequence list-13111-00035-US.txt

Output Set: N:\CRF4\04042006\J573130.raw

339	145 150	155	
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358	<213> ORGANISM: Artificial sequence		
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361	<223> OTHER INFORMATION: Primer: Mk	e 339	
363	<400> SEQUENCE: 8		
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367	<210> SEQ ID NO: 9		
•		the first than the second	·· · · ₹
وى د	<211. TYPE: DNA		•
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372	<220> FEATURE:		
	<223> OTHER INFORMATION: Primer: Mk	e 366	
375	<400> SEQUENCE: 9		
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	<221> NAME/KEY: MISC_FEATURE		
	<222> LOCATION: (1)(10)	C torminus	
417	<223> OTHER INFORMATION: Fragment:	C CELIMINUS	

10/5 15/150

Page 6

```
<210> 15
<211> 60
<212> PRT
<213> Lactobacillus brevis
<220>
<221>
       VARIANT
<222> (47)..(47)
<223> Amino acid is Ala or Lys
<220>
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       (48) . . (48)
       Amino acid is Lys or Ala
<220>
<221>
       VARIANT
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       (53) . . (53)
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<220>
<221> VARIANT
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       (59) . . (59)
       Amino acid is Phe, Val, Gly, or Asn
<220>
<221>
       misc feature
<222>
        (60)...(60)
      (Xaa is unreadable
<223>
<400>
Ser Asn Arg Leu Asp Gly Lys Val Ala Ile Val Thr Gly Gly Thr Leu
                                                            15
Gly Ile Gly Leu Ala Ile Ala Thr Lys Phe Val Glu Glu Gly Ala Lys
            20
Val Met Ile Thr Gly Arg His Ser Asp Val Gly Glu Lys Ala Ala Lys
        35
                                                              explain "Xaa"
Ser Val Gly Thr Fro Asp Gin Ile Gln Phe Phe
    50
                                िट type of errors shown exist throughout
                                the Sequence Listing. Please check subsequent
                                Conces for similar errors.
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 04/04/2006
PATENT APPLICATION: US/10/573,130 TIME: 10:13:07

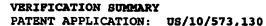
Input Set : A:\Final Sequence list-13111-00035-US.txt

Output Set: N:\CRF4\04042006\J573130.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:15; Xaa Pos. 60
Seq#:16; Xaa Pos. 19,20
Seq#:17; Xaa Pos. 12,13,14,15
Seq#:18; Xaa Pos. 8
Seq#:19; Xaa Pos. 9,11,12,13,14,15
Seq#:22; Xaa Pos. 6,10,11,12,13,14,15
Seq#:23; Xaa Pos. 6,12,15,16,17,18
Seq#:24; Xaa Pos. 6,10,11,12,13,14,15,16,17
Seq#:25; Xaa Pos. 16,17,18,19,20
Seq#:26; Xaa Pos. 1,3
Seq#:27; Xaa Pos. 9,13
Seq#:28; Xaa Pos. 7,17,18,19,20
Seq#:30; Xaa Pos. 1,10,11,12,13,14,15,16,17,18,19,20
Seg#:32: Xaa Pos - 2-.30
Deq#:33; Add PUS. 5,0,7,0,5,11
Seq#:34; Xaa Pos. 3,13,14,15,16,17,18,19,20
Seq#:35; Xaa Pos. 11,12,13,14
Seq#:36; Xaa Pos. 1
Seq#:40; Xaa Pos. 1
Seq#:41; Xaa Pos. 2,39,40
Seq#:42; Xaa Pos. 37,38,39
Seq#:43; Xaa Pos. 12,13,14,15
Seq#:44; Xaa Pos. 13,14,15
```



DATE: 04/04/2006 TIME: 10:13:07

Input Set : A:\Final Sequence list-13111-00035-US.txt

Output Set: N:\CRF4\04042006\J573130.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:502 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:48 L:602 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:16 L:623 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0 L:640 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0 L:711 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0 L:711 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
L:806 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:903 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
L:907 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:16
L:929 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:933 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:16
L:950 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0
L:954 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:16 L:976 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0 L:1063 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0 L:1160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0 L:1164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:16 M: 326 M: 341 W: (46) "n" or "Xaa" used, Δfor SEQ ID#: 30 after pos.: 0 5:1330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:16 ' L:1560 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:16 L:1577 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0 L:1638 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0 L:1642 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:16 L:1659 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0 L:1691 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0 L:1821 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0 L:1851 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0 L:1859 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:32 L:1993 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:32 L:2010 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0 L:2072 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0